First Nations Water Rights in British Columbia

A Historical Summary of the rights of the Nazko First Nation

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WATER MANAGEMENT BRANCH

FIRST NATIONS WATER RIGHTS IN BRITISH COLUMBIA:

A Historical Summary of the rights of the Nazko First Nation

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Gary Robinson
Project Manager
Water Management Branch

TABLE OF CONTENTS

LOCATION..... 1

WATER ALLOCATIONS..... 2

HISTORY, CURRENT STATUS AND NOTES..... 2

Michelle Creek
History..... 2
Current Status..... 3
Notes..... 3

OTHER INFORMATION..... 3

APPENDICES

TAB NO.

1 TABLE: Summary of Water Records for the Nazko Band.

2 LICENSES and PLATS
Conditional Licenses 4271 and 34550.

3 PERMIT AUTHORIZING THE OCCUPATION OF CROWN LAND:
Permit 7174.

4 STREAM REGISTER REPORTS
Michelle Creek.

5 WATER SURVEY OF CANADA RECORDS
Nazko River.

6 COPIES OF THE DATA SUMMARY OF GROUNDWATER RECORDS IN THE NAZKO RESERVE NO. 20 AREA.

7 MAP: NAZKO BAND - Nazko Reserve No. 20.

FIRST NATIONS WATER RIGHTS REPORT

BAND: Nazko

ADDRESS: 1954 Hilborn Rd. Quesnel, B.C. V2J 3P7

CHIEF: Stanley Boyd

PHONE: 992-9810 **FAX:** 992-7854

AFFILIATION: Carrier-Chilcotin Tribal Council

LOCATION:

The Nazko Band occupy 4,556.5 acres (1,844 hectares) in reserve lands. The reserves include:

Baezaiko River (No. 25, No. 26, No. 27)
Coglistiko River No. 29
Deep Creek No. 5
Euchinico Creek (No. 17, No. 18, No. 19)
Fishpot Lake No. 24
Lower Fishpot Lake No. 24A
Michelle Creek (No. 22, No. 24)
Nahlquonate No. 2
Nazko (No. 20, No. 21)
Nazko Cemetery No. 20A
Redwater Creek No. 30
Trout Lake Jonny No. 15
Trout Lake Alec No. 16

Of the 13 reserves listed, water rights have been assigned on one reserve only, Nazko Reserve No. 20, a reserve of 1,146.0 acres (463.8 ha).

According to the latest population figures compiled by the Ministry of Finance, the Nazko Band has 230 persons living on-reserve as registered members. It's total population, including members living on- and off-reserve, is reported as 259.

Nazko Reserve No. 20 is located in the Interior Plateau region of the province and is classified as occurring in the Sub-Boreal Spruce Biogeoclimatic Zone. The reserve ranges in elevation from 2800 to 3000 feet above sea level, and experiences a climate with average daily temperatures ranging from a low of -10 degrees centigrade, in January, to a high of less than 16 degrees centigrade, in July. Average rainfall for the area totals between 30 and 50 centimetres, annually.

Water courses of significance include:

- Michelle Creek (formerly Nazko Reserve Creek) - flows northeast, across the southwestern corner of Nazko Reserve No. 20. Upon exiting Nazko Reserve No. 20 the Creek flows in a southerly direction and discharges into Stump Lake.

WATER ALLOCATIONS:

With respect to the Nazko Band, there are no records of water allocations made by the either the Indian Reserve Commission, by the Lieutenant Governor-in-Council (by Order-in-Council), or by Order of the Board of Investigation. Similarly, no records of actions to amend licensed rights, pursuant to provision in the *Water Act.*, exist for the Band.

The water rights of the Nazko Band have been determined by one action of government over the years:

1) The granting of water licenses in response to Federal Government applications requesting authorization for the use of water on reserve lands.

HISTORY, CURRENT STATUS AND NOTES:

The history of water rights, the current status of rights and notes for the Nazko Band with respect to Michelle Creek are as follows:

Michelle Creek (formerly Nazko Reserve Creek)

History:

Oct 17, 1919 The Comptroller of Water Rights issued Conditional Water License 4271 to W. J. Allen, Indian Agent, on the behalf of the Nazko Band. The license has a date of precedence of September 16, 1918 and authorizes the diversion of 125 acre feet per year (from April 1 to September 30) from Michelle Creek, for irrigation purposes on 50 acres of Nazko Reserve No. 20.

May 15, 1969 The Comptroller of Water Rights issued Conditional Water License 34550 to the Superintendent-General of Indian Affairs on behalf of the Nazko Band. The license has a date of precedence of August 1, 1967 and authorizes the diversion of 10,000 gallons per day, year-round from Michelle Creek, for waterworks purposes on Nazko Reserve No. 20.

Accompanying Conditional License 34550, the Deputy Minister of Lands issued a Permit Under the Water Act, Authorizing the Occupation of Crown Land - Permit No. 7174. The permit authorizes the occupation of 0.38 acres of unsurveyed land in the Rupert Land District.

Current Status:

Currently two licenses are recorded on Michelle Creek. Both licenses are held by the Nazko Band: Conditional Water License 4271 and Conditional Water License 34550.

The Water Survey of Canada has no records of streamflow for Michelle Creek. No alternate sources of water availability data on the Creek were located during this study.

Notes:

1. The existence of Conditional Water License 34550 qualifies the Michelle Creek drainage system for designation as a 'Community Watershed' under provisions contained in the Forest Practices Code.

OTHER INFORMATION:

Groundwater Records:

A review of well records maintained by the MELP - Groundwater Section found that 1 well has been reported on the Nazko Reserve. The well yields 15 gallons of water per minute. The extent of utilization of the well, at present, is not known. Further details have been appended to the report.

As the provision of well information to the Groundwater Section is voluntary, this review should not be assumed to be complete.

Alternate Water Supplies:

The Nazko River flows through the eastern portion of Nazko Reserve No. 20. Water Survey of Canada records show that gauging stations have been operated from 1965 to 1990 at Station 08KF001 (Above Michelle Creek). The records report that for the period recorded, a low mean monthly flow of 1.21 cubic metres per second occurred in January, increasing to a high, in May, of 19.5 cubic metres per second.

Summary of Water Records								
Nazko Band								
Water Source	**Priority Date**	**Reserve Name**	**File No.**	**Document Type**	**Status**	**Superceded By**	**Licence PUC/MOD & OIC Allotments**	**Comments**
Michelle Creek	1918/09/16	Nazko #20	6463	CL 4271	Current		125 AF/Irrigation	CL 4271: **Priority 1** - Michelle Creek.
Michelle Creek	1967/08/01	Nazko #20	273808	CL 34550	Current		10,000 GAD/Waterworks	CL 34550: **Priority 2** - Michelle Creek.

LEGEND:

Licence Types (Document Types)
CL: Conditional Licence
FL: Final Licence

Mechanisms for Allocation (Document Type)
OIC: Order-in-Council (as issued by the Luitenant Governor in Council)
MOD: Minute of Decision (as recorded under the Indian Reserve Commission)
IRC: Indian Reserve Commission
AGBC: Attorney Generals Office of BC (followed by File #)

Allotment Units (Licence PUC/MOD & OIC Allotments)
GAD: Gallons a day
AF: Acre feet
CFS: Cubic feet per second

PROVINCE OF BRITISH COLUMBIA. WATER RIGHTS BRANCH. DEPARTMENT OF LANDS.

CONDITIONAL WATER LICENCE

(IRRIGATION)

WHEREAS W. J. McAllan, Agent for the Indians located on the Nazko Indian Reserve., whose post-office address is Fort Fraser, B. C. as owner or lawful occupant of the land hereinafter specified, has applied for a licence to take and use water in the manner hereinafter set out, and has taken all the preliminary steps required of such applicant under the "Water Act, 1914," prior to the issue of this licence, and is, under the said Act, entitled thereto:

(1.) Now, therefore, in pursuance of the said Act, this conditional licence is issued, granting the licensee thereunder the right to take and use water under the following terms and conditions:—

(*a.*) The source of the water-supply is Nazko Reserve Creek

a tributary of Stump Lake

(*b.*) The point of diversion from the stream is located as shown in the exhibit marked "A" hereto attached, which is incorporated herewith and made a part hereof, the original of which is attached to the counterfoil of this licence on file in the office of the Comptroller of Water Rights, Parliament Buildings, Victoria.

(*c.*) The date from which this licence shall take precedence is 16th September, 1918

(*d.*) The purpose for which the water is to be used is irrigation.

(*e.*) The maximum quantity of water which may be used at the place of use when all the lands mentioned in item (*g*) hereof are under irrigation is, until lawfully altered, 125 acre-feet per annum; and the maximum quantity which may be used per acre at the said place of use in any year is 2½ acre-feet: Provided that if any records have been issued, or if any other licences have been or may hereafter be issued, for the use of water upon the said lands, the maximum quantity allowed under this licence shall be reduced by such quantities as may from time to time be used upon the said lands under such other records or licences, including the records or licences at present outstanding, namely, Licence No. ------ from ---------- (Stream.)

and Licence No. ------ from ---------- (Stream.)

And provided further that in such cases the Comptroller may, after the requisite hydrographic data have been accumulated for determining the particular quantity of water which may be used under this licence, require the surrender thereof for the purpose of readjustment, and may amend the same by stating therein such particular quantity so determined. The maximum quantity which may be diverted from the stream per annum is 2½ acre-feet per acre of land irrigated and an additional amount for reasonable seepage and evaporation.

And provided further that there may be used in addition ---------- gallons of water per day throughout the whole year for domestic purpose as being incidental to the irrigation purpose.

Licence Number 4271

Form 1004, W.R.B. (Conditional Licence—Irrigation).—1,000-10-18.

Copy for Comptroller

(*f.*) The period of the year during which the water may be used is 1st April to 30th September

(*g.*) The area and description of the irrigable lands to which this right may extend on completion of works and beneficial use of the water in the irrigation of the said lands are about 50 acres, comprising part of the Nazko Indian Reserve.

The extent and location of the said irrigable lands are further shown in the said exhibit "A."

(*h.*) The other terms and conditions respecting the right are:—

(1.) Works for the diversion and the carriage of the water as set forth in the exhibit marked "B" which is hereto attached and hereby made a part hereof shall be constructed in a workmanlike manner and to the satisfaction of the Comptroller of Water Rights.

(2.) The said construction shall be commenced on or before the first day of May, 19.21.

(3.) The said construction shall be prosecuted with due diligence and to the satisfaction of the Comptroller, and shall be completed on or before the thirtieth day of September, 19.24.

(4.) The lands described in clause (*g*) hereof shall have been properly prepared for irrigation and shall have been irrigated beneficially from the said works on or before the thirtieth day of September, 19.24.

(5.)

(*i.*) Before any change is made in the said works which would be a material deviation from the plans as approved or the works as accepted by the Comptroller, plans of such proposed change must be filed with the Comptroller and approved by him.

(*j.*)

(2.) This licence shall not in any way be deemed to be a final licence for the use of water, but shall have the effect only of a conditional licence issued under Part V. of the "Water Act, 1914," and shall be subject to all the provisions of said Act, including the filing of proof of the completion of the said works and the putting of the water to such beneficial use within the time limited by the provisions of section 117 of the said Act.

Issued this seventeenth day of October, 19.19.

E. H. Cleveland
Comptroller of Water Rights.

File No. 06463.

Licence Number 4271

Copy for Comptroller

PROVINCE OF BRITISH COLUMBIA. WATER RIGHTS BRANCH. DEPARTMENT OF LANDS.

EXHIBIT "B."

(APPROVAL OF PLANS AND LIST OF WORKS TO BE CONSTRUCTED.)

The works which are accepted as necessary and suitable for the taking and (or) using of the water under the above-mentioned licence, and which are more fully set out in the plans and specifications filed in the office of the Comptroller of Water Rights numbered 24226 C.

as altered, amended, or limited by supplemental plans and specifications numbered

or in letters or other documents referred to as

which plans and specifications as thus altered, amended, or limited are hereby approved, are as follows:—

Diversion dams and ditches.

ENTERED ON Map No. 82 C/109 By TWS.

E. H. Cleveland
Comptroller of Water Rights.

File No. 06463.

Form 1005. W.R.B. (Approval of Plans)—2,000-10-13—(Forming part of Conditional Water Licence No. 4271)

Copy for Comptroller

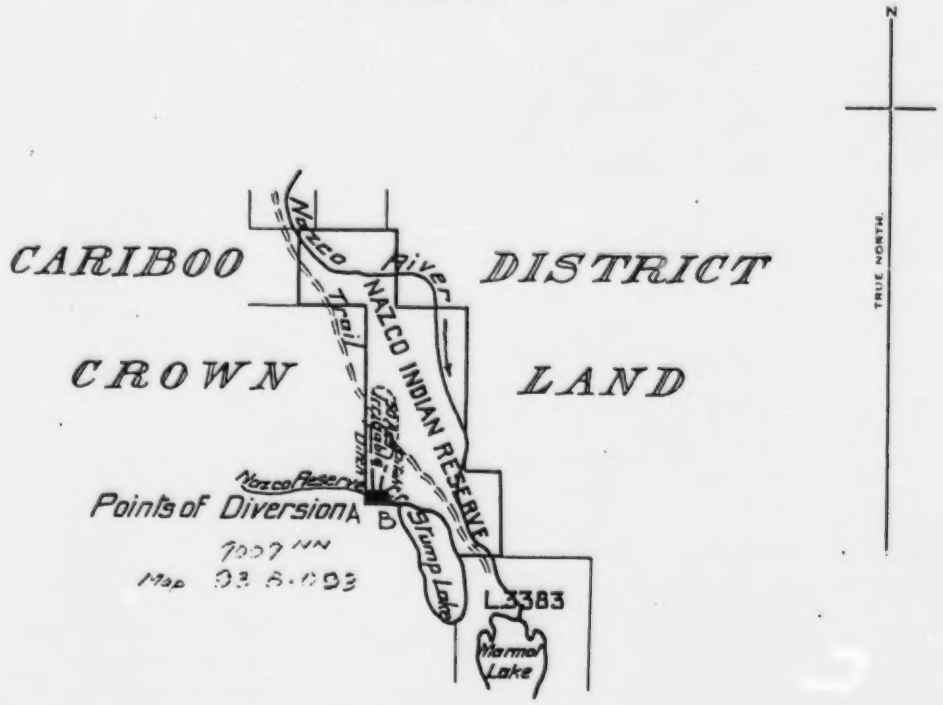
6

British Columbia.

To accompany *Conditional Licence* No. *4271* ..... Precinct.

QUESNEL WATER DISTRICT.

Scale, 80 Chains to 1 Inch.



The boundaries of the land to which this licence is appurtenant are shown shaded.

Signature ..... *E. St. Cleveland*

Date ..... *17th October 1919.*

A. CM.

EXHIBIT "A" 22 C.L. 4271.

WATER RESOURCES SERVICE
WATER RIGHTS BRANCH

DEPARTMENT OF LANDS, FORESTS,
AND WATER RESOURCES

THE PROVINCE OF BRITISH COLUMBIA—WATER ACT

CONDITIONAL WATER LICENCE

Superintendent General of Indian Affairs, (Williams Lake Agency) of Ottawa, Ontario.

is/are hereby authorized to divert and use water as follows:—

(*a*) The source(s) of the water-supply is/are Michelle Creek.

(*b*) The point(s) of diversion is/are located as shown on the attached plan.

(*c*) The date from which this licence shall have precedence is 1st August, 1967.

(*d*) The purpose for which the water is to be used is waterworks.

(*e*) The maximum quantity of water which may be diverted is 10,000 gallons a day,

and such additional quantity as the Engineer may from time to time determine should be allowed for losses.

(*f*) The period of the year during which the water may be used is the whole year.

(*g*) The land upon which the water is to be used and to which this licence is appurtenant is Nazko Indian Reserve No. 20, Cariboo District.

(*h*) The works authorized to be constructed are tank, pipe and distribution system,

and they shall be located approximately as shown on the attached plan.

(*i*) The construction of the said works has been completed and the water shall be beneficially used on or before the 31st day of December, 1972.

ENTERED ON
Map No. 93 B/NW(E.½)
By ...

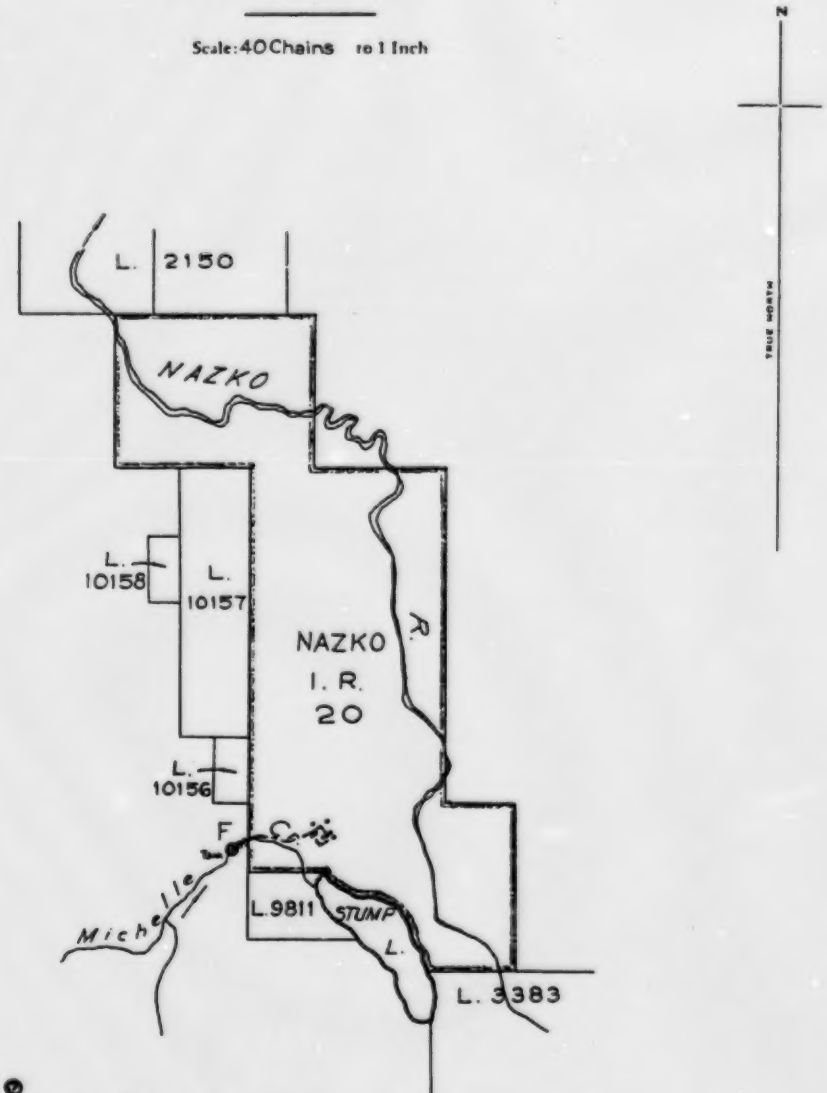
H. D. DeBeck,
Comptroller of Water Rights.

File No. 0273808 Date issued: 15 May 1969 Conditional Licence No. 34550

British Columbia

QUESNEL WATER DISTRICT
CARIBOO DISTRICT

Scale: 40 Chains to 1 Inch



LEGEND

Point of Diversion
Ref. Map 93 B/NW (P-3) 93 B 003/0003 NM
Pipe
Right-of-Way

The boundaries of the land to which this licence is appurtenant are shown thus:

Signature

Date 15th May 1969

6

NAZKO PRECINCT

C.L. 34550
File 0273808
R/W Permit 7174

PROVINCE OF
BRITISH COLUMBIA

DEPARTMENT OF LANDS, FORESTS,
AND WATER RESOURCES

PERMIT UNDER THE WATER ACT AUTHORIZING THE OCCUPATION OF CROWN LAND

Superintendent General of
Indian Affairs,
(Williams Lake Agency), of Ottawa, Ontario,

the holder(s) of Conditional/~~Final~~ Water Licence(s) No. 34550 authorizing the diversion of water from Michelle Creek is/are hereby

authorized to occupy Crown land by constructing, maintaining, and operating thereon the works authorized under the said water licence and any licences which may be issued in substitution thereof.

(*a*) The Crown land which is authorized to be occupied under this permit is a portion of unsurveyed land, Cariboo District,

the location of which is shown approximately on the plan attached to the said water licence.

(*b*) The approximate dimensions of the Crown land authorized to be occupied under this permit are

550 feet in length and 30 feet in width, having an area of 0.38 acre.

(*c*) Subject to the payment of royalty, stumpage, and other compensation as provided under Condition 5, the permittee is authorized to cut and remove from the said land any timber the removal of which is necessary to permit construction and maintenance of the said works.

(*d*) The annual rental for this permit is $ 2.00 , which is subject to review and revision at any time at the discretion of the Crown.

(*e*) This permit is appurtenant to the land to which the aforesaid water licence is appurtenant.

(*f*) The conditions relative to the rights granted under this permit are printed on the back of this form.

I HEREBY CERTIFY THIS TO BE A TRUE COPY OF A
DOCUMENT ON RECORD IN THE WATER RIGHTS BRANCH

COMPTROLLER OF WATER RIGHTS

File No. 0273808

Ref. Map 93 B/NW (F-3)

W.R. Map

.....
Deputy Minister of Lands.

Date issued: 15th May, 1969 Permit No. 7174

W.R.D. 12a—4M-469-2939

Stream Register Report Water Licence Information System

Report Requested By : JROILL
Date Report Requested : 1995/10/19 11:02
Report Sorted By : Source Gazetted - Priority Date - Licence Number
Selection Criteria
START POINT : PD40453 - 93.B.093 F
END POINT : S020488 - Michelle Creek right of Stump Lake

Stream Register Report

Water Licence Information System

DATE: 1995/10/19
TIME: 11:02
PAGE: 001

Priority YYYY/MM/DD	Licence Number	File Number	Appurtenancy	Licensee	PUC	Quantity/Units	Term Start	Term End	Licence Comments	Process Status
Source		WR Map	POD	RED POD Comments					Prec	
1918/09/16	C004271	0006663	50 AC OF NAZKO IR CARIBOO DIST	NAZKO INDIAN BAND 989-720-8296 BOX 4534 310 FRONT ST QUESNEL BC V2J3H8	IRR	125.00 AF	Apr 01	Sep 30		
Michelle Creek		WR93.B.093	A	N					26A QUE - NAZKO	
Michelle Creek		WR93.B.093	B	N						
1967/08/01	C034550	0273808	IR 20 NAZKO CARIBOO DIST	NAZKO INDIAN BAND 989-720-8296 BOX 4534 310 FRONT ST QUESNEL BC V2J3H8	MWKOT	10,000.00 GD	Jan 01	Dec 31		
Michelle Creek		WR93.B.093	F	N					26A QUE - NAZKO	

---------- Total of 2 Licences Reported ----------

NAVER CREEK AT HIXON - STATION NO. 08KE014

ANNUAL EXTREMES OF DISCHARGE AND ANNUAL TOTAL DISCHARGE FOR THE PERIOD OF RECORD.

YEAR	MAXIMUM INSTANTANEOUS DISCHARGE (m^3/s)	MAXIMUM DAILY DISCHARGE (m^3/s)	MINIMUM DAILY DISCHARGE (m^3/s)	TOTAL DISCHARGE (dam^3)	YEAR
1956	---	---	---	---	1956
1957	---	133 ON MAY 20 *	---	---	1957
1958	---	83.8 ON MAY 02	0.0578 ON FEB 24 *	329 000	1958
1959	---	50.7 ON MAY 09	0.102 ON AUG 02	---	1959
1960	---	---	---	---	1960
1962	---	113 ON JUN 07	0.538 ON AUG 11	---	1962
1963	---	117 ON OCT 21	0.261 ON SEP 26	---	1963
1964	---	90.9 ON APR 16	1.06 ON AUG 20	340 000	1964
1965	---	92.3 ON SEP 24	0.917 ON SEP 15	239 000	1965
1966	---	78.2 ON APR 28	0.238 ON AUG 04	247 000	1966
1967	---	72.2 ON MAY 07	0.736B ON FEB 05	269 000	1967
1968	---	73.1 ON MAY 08	0.759 ON SEP 29	276 000	1968
1969	---	41.3 ON MAY 21	1.06 B ON DEC 31	214 000	1969
1970	---	67.1 ON APR 13	0.586B ON FEB 01	184 000	1970
1971	---	64.3 ON MAY 17	0.487 ON JUL 20	215 000	1971
1972	---	80.4 ON APR 26	0.430 ON AUG 13	292 000	1972
1973	---	75.6 ON MAY 14	0.357 ON SEP 04	210 000	1973
1974	---	75.3 ON OCT 28	0.379 ON AUG 15	313 000	1974
1975	---	78.4 ON MAY 08	0.447 ON SEP 04	---	1975
		54.4 ON MAY 12	0.665B ON FEB 15	263 000	MEAN

B - ICE CONDITIONS * - EXTREME RECORDED FOR THE PERIOD OF RECORD

NAZKO RIVER ABOVE MICHELLE CREEK - STATION NO. 08KF001

MONTHLY AND ANNUAL MEAN DISCHARGES IN CUBIC METRES PER SECOND FOR THE PERIOD OF RECORD

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	YEAR
1965	1.77	2.30	2.65	28.6	47.5	14.5	5.45	3.14	2.06	3.09	2.62	2.04	9.68	1965
1966	1.68	1.49	1.25	19.0	18.7	9.51	5.85	4.58	1.81	2.07	1.86	1.80	5.79	1966
1967	1.72	1.71	1.56	3.25	11.7	6.57	1.11	0.413	0.212	0.755	0.913	0.633	4.50	1967
1968	0.761	0.798	1.34	4.99	31.6	15.6	3.91	3.10	2.24	1.63	2.33	1.92	6.02	1968
1969	1.36	1.18	1.46	15.0	13.0	3.31	6.08	1.18	1.96	2.34	2.90	1.72	4.30	1969
1970	1.38	1.21	0.994	3.14	6.97	2.63	0.688	0.422	0.605	0.813	0.518	0.690	1.68	1970
1971	0.861	0.961	1.13	8.28	24.9	5.95	3.10	2.03	1.29	1.28	1.25	1.30	4.41	1971
1972	1.08	0.876	2.39	6.61	34.3	13.3	3.44	1.12	0.808	1.09	1.83	1.37	5.71	1972
1973	1.51	2.05	2.83	9.58	23.2	4.50	1.68	0.815	0.769	1.15	1.21	1.25	4.26	1973
1974	1.08	1.14	1.62	13.6	33.0	9.55	2.97	0.655	0.434	0.890	0.901	1.03	5.60	1974
1975	1.05	0.957	1.25	4.26	14.2	5.44	2.52	1.40	1.52	1.31	2.95	1.80	3.24	1975
1976	1.66	1.76	1.69	14.1	30.9	15.6	7.05	17.1	9.89	5.23	4.56	3.99	9.55	1976
1977	2.16	2.62	2.53	11.3	---	---	11.3	5.42	4.53	3.51	2.25	1.62	---	1977
1978	1.44	1.65	1.85	15.8	28.4	9.21	3.95	1.71	2.06	1.59	1.55	1.45	5.71	1978
1979	1.29	1.34	2.10	5.68	29.7	7.70	3.51	1.02	0.588	0.881	0.789	0.968	4.66	1979
1980	0.738	0.605	0.787	5.86	4.59	11.7	19.9	3.47	4.07	2.52	2.35	1.78	4.87	1980
1981	1.53	1.66	2.68	4.36	7.86	8.86	3.95	2.42	1.24	1.22	1.27	1.07	3.20	1981
1982	0.881	0.778	0.636	2.00	24.7	5.15	5.68	4.91	6.24	5.52	5.45	1.51	5.16	1982
1983	0.886	1.13	1.66	3.62	2.80	7.47	9.42	3.32	1.57	1.92	2.77	1.38	3.84	1983
1984	1.04	1.08	1.70	6.67	10.1	7.04	2.95	0.788	1.07	1.75	1.16	1.05	3.03	1984
1985	1.02	1.28	1.98	11.2	12.7	3.89	0.415	0.336	0.440	1.24	0.859	0.489	2.99	1985
1987	1.04	1.35	1.95	8.74	12.2	2.05	0.989	0.678	---	---	---	---	---	1987
1988	0.399	0.441	0.768	3.51	5.37	2.67	1.48	0.920	0.451	0.809	1.05	0.580	1.37	1988
1989	0.547	0.422	0.374	3.48	3.70	1.81	2.90	4.92	3.65	1.53	1.73	1.34	2.21	1989
1990	1.15	0.973	1.17	13.5	14.0	18.7	6.68	1.58	1.07	1.54	1.97	1.87	5.35	1990
MEAN	1.21	1.27	1.61	9.05	19.5	7.86	4.63	2.70	2.09	1.91	1.89	1.42	4.61	MEAN

LOCATION - LAT 52 55 45 N DRAINAGE AREA, 3 240 km^2
LONG 123 32 50 W NATURAL FLOW

NAZKO RIVER ABOVE MICHELLE CREEK - STATION NO. 08KF001

ANNUAL EXTREMES OF DISCHARGE AND ANNUAL TOTAL DISCHARGE FOR THE PERIOD OF RECORD

YEAR	MAXIMUM INSTANTANEOUS DISCHARGE (m^3/s)	MAXIMUM DAILY DISCHARGE (m^3/s)	MINIMUM DAILY DISCHARGE (m^3/s)	TOTAL DISCHARGE (dam^3)	YEAR
1965	115 AT 00:45 PST ON APR 29 *	113 ON APR 29 *	1.39 ON OCT 04	305 000	1965
1966	26.4 AT 12:00 PST ON MAY 07	26.3 ON MAY 08	1.08 B ON MAR 04	183 000	1966
'67	53.8 AT 19:30 PST ON MAY 09	52.1 ON MAY 09	0.147 ON SEP 23	142 000	1967
68	43.6 AT 11:00 PST ON MAY 26	43.0 ON MAY 26	0.532B ON JAN 14	190 000	1968
.69	28.9 AT 23:00 PST ON APR 14	27.7 ON APR 15	0.439 ON SEP 01	136 000	1969
1970	9.94 AT 07:30 PST ON MAY 17	9.85 ON MAY 17	0.331 ON AUG 16	52 900	1970
1971	43.3 AT 07:47 PST ON MAY 05	43.1 ON MAY 05	0.714B ON OCT 28	139 000	1971
1972	---	60.9 ON MAY 15	0.532 ON SEP 30	181 000	1972
1973	---	38.8 ON MAY 05	0.657 ON AUG 14	134 000	1973
1974	---	76.2 ON MAY 02	0.374 ON AUG 22	177 000	1974
1975	---	19.7 ON MAY 13	0.926B ON FEB 16	102 000	1975
1976	---	69.9 A ON MAY 06	1.57 B ON JAN 04	302 000	1976
1977	---	---	1.30 B ON DEC 31	---	1977
1978	32.8 AT 12:40 PST ON MAY 12	32.0 ON MAY 12	1.15 ON AUG 10	180 000	1978
1979	51.8 AT 21:00 PST ON MAY 05	51.3 ON MAY 06	0.445 ON SEP 20	147 000	1979
1980	41.7 AT 03:35 PST ON JUN 28	39.9 ON JUN 28	0.566B ON FEB 20	154 000	1980
1981	16.1 AT 18:00 PST ON MAY 28	15.3 ON MAY 28	0.910B ON DEC 31	101 000	1981
1982	37.4 AT 15:09 PST ON MAY 16	37.0 ON MAY 17	0.599B ON MAR 04	163 000	1982
1983	21.3 AT 02:25 PST ON JUL 23	19.4 ON JUL 23	0.852B ON JAN 22	89 600	1983
1984	16.5 AT 17:07 PST ON MAY 18	16.4 ON MAY 18	0.488 ON AUG 29	96 000	1984
1985	23.9 AT 20:50 PST ON APR 15	23.4 ON APR 16	0.106 ON AUG 30 *	94 200	1985
1987	31.5 AT 02:20 PST ON MAY 03	30.3 ON MAY 03	---	---	1987
1988	---	6.50B ON APR 20	0.270 ON SEP 04	43 300	1988
1989	10.1 AT 23:21 PST ON AUG 24	9.75 ON AUG 25	0.360B ON MAR 02	69 600	1989
1990	46.6 AT 04:08 PST ON JUN 14	45.3 ON JUN 14	0.711 ON AUG 28	169 000	1990
				146 000	MEAN

A - MANUAL GAUGE (SEE REFERENCE INDEX) B - ICE CONDITIONS * - EXTREME RECORDED FOR THE PERIOD OF RECORD

NECHAKO RIVER AT FORT FRASER - STATION NO. 08JA001

MONTHLY AND ANNUAL MEAN DISCHARGES IN CUBIC METRES PER SECOND FOR THE PERIOD OF RECORD

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	YEAR
1915	---	---	---	---	---	---	332	233	149	108	104	---	---	1915
1916	---	---	---	---	301	492	520	282	179	109	---	---	---	1916
1917	---	---	---	---	188	465	401	271	177	174	239	---	---	1917
1929	---	---	---	---	---	---	---	224	167	131	155	118	---	1929
1930	63.5	60.4	70.1	108	230	437	413	262	155	138	136	---	---	1930
1931	---	---	---	90.9	247	408	388	216	141	103	---	---	---	1931
1932	---	---	---	---	320	401	329	250	202	179	---	---	---	1932
1933	---	---	---	---	---	419	381	248	158	116	---	---	---	1933
34	---	---	---	194	535	453	337	252	186	282	247	---	---	1934
1935	---	---	---	---	407	543	413	239	144	110	194	---	---	1935
1936	---	---	---	---	302	454	310	187	139	179	249	---	---	1936
1937	---	---	---	---	346	577	455	240	180	156	---	---	---	1937
1938	---	---	---	---	283	444	382	218	147	118	107	---	---	1938
1939	---	---	---	---	361	549	470	293	173	125	171	308	---	1939
1940	---	---	---	192	451	502	396	277	183	143	178	---	---	1940
1941	---	---	---	168	318	407	296	174	140	159	216	170	---	1941
1942	---	---	---	75.6	257	507	334	185	124	102	---	---	---	1942
1943	---	---	---	---	228	456	389	225	137	106	85.2	---	---	1943
1944	---	---	---	---	181	343	276	181	128	153	127	---	---	1944
1945	---	---	---	---	309	561	311	189	119	94.3	---	---	---	1945
1946	---	---	---	---	320	574	525	258	132	123	---	---	---	1946
1947	---	---	---	---	361	493	335	221	133	126	209	---	---	1947
1948	---	---	---	---	366	758	457	289	206	157	---	---	---	1948
1949	---	---	---	---	351	530	347	246	166	114	147	---	---	1949
1950	---	---	---	---	---	446	460	236	151	123	---	---	---	1950
1951	---	---	---	---	360	515	413	212	117	85.1	---	---	---	1951
1952	---	---	---	---	276	496	434	239	141	38.2	---	---	---	1952
1953	---	---	---	---	8.64	7.60	5.76	5.43	16.0	8.08	---	---	---	1953
MEAN	63.5	60.4	70.1	138	304	471	375	227	150	127	171	199	---	MEAN

LOCATION - LAT 54 03 18 N LONG 124 33 39 W DRAINAGE AREA 17 700 km² REGULATED SINCE 1952

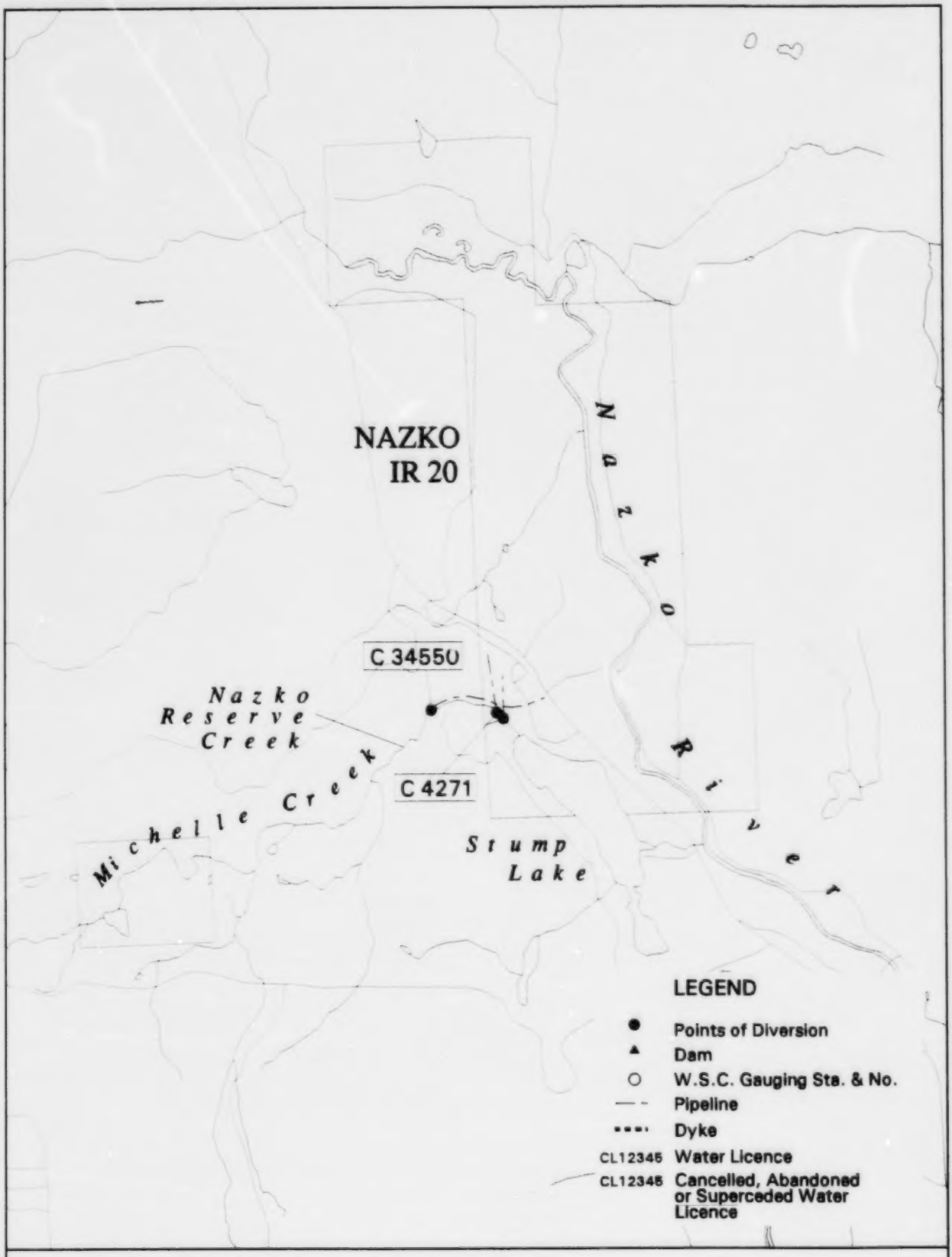
REMARKS - DRAINAGE AREA INCLUDES THE 14 000 KM2 BEHIND KENNEY DAM

23/10/95

Ministry of Environment - Water Management Branch - Groundwater Section
Groundwater Database System
Data Summary - with Legal Descriptions and Old Coordinates

BCGS Map Area	Well No.	Well Tag No.	Lot No.	Plan No.	Blk No.	TP	SC	RG	D.L.	Z	X	Y	Old Well No.	L.D.	Site Address	Date Constructed (dmy)	Well Depth (ft.)	Well Diam. (in.)	Drill Contr No.	Const. Method	Well Yield	Yld. Unt.	Depth ss Water (ft.)	Depth to Bedrk (ft.)	Aquif Litho	Screen Interval (ft.)	G.W. Rpt	Chem Lab
093B.093.1.3.3	001	000000029134								00	00	00	000	05	NAZKO RESERVE	01-11-1973	240.0	6.5	097	UNK	900.0	GPM	16	212	BED			

DISCLAIMER: The Province disclaims all responsibility for the accuracy of this information. This information should not be used as a basis for making financial or any other commitments.



Stump Lake

Scale 1:30,000

Ministry of Environment, Lands & Parks | Date: March 26, 2000 | Environment & Lands Division